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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/427,260	10/25/1999	FARHAD KHOSRAVI	239/227	2937

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EXAMINER

PELLEGRINO, BRIAN E

ART UNIT	PAPER NUMBER
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3738

DATE MAILED: 12/03/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

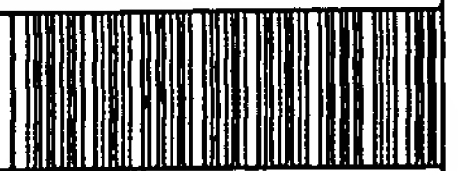
# Office Action Summary

Application No.  
09/427,260

Applicant(s)  
Khosravi et al.

Examiner  
Brian Pellegrino

Art Unit  
3738



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on May 14, 2001
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-45, and 51-58 is/are pending in the application.
- 4a) Of the above, claim(s) 11-14, 18, 19, and 23-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-10, 15-17, 20-22, 29-45, and 51-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Oct 25, 1999 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 20) ☐ Other:

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## DETAILED ACTION

### *Election/Restriction.*

1. Applicant's election of Species VIII in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 11-14, 18, 19, 23-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7.

### *Drawings*

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the embodiment of a stent with a coiled sheet of expandable wing-like elements having a plurality of locking elements must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

### *Claim Rejections - 35 U.S.C. § 102*

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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5. Claims 1-3, 5-10, 15-17, 20-22, 31-36, 40, 42-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Khosravi et al. (5441515). Figs. 4, 9, 18 show embodiments of a coiled sheet stent having overlapping inner and outer sections. Figure 12 shows that the stent can be formed of stretchable elements. Regarding the method claims, see col. 7, lines 1-20. See col. 8, lines 44-49 where deployment of the stent engages the vessel wall. Khosravi et al. also discloses locking elements for engaging openings in the outer longitudinal section, Fig. 15. Khosravi discloses laser etching can be used to form patterns in sheet material, col. 8, lines 63,64. Figs. 19 and 20 show locking elements formed along an edge of the sheet.

6. Claims 55, 56, 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Richter et al. (5836964). Fig. 4 shows a stent formed of a coiled sheet with stretchable cells having a plurality of wing-like elements. Figs. 5A and 6 illustrate that the sheet is coiled such that there is overlapping inner and outer longitudinal sections. It can be seen (Fig. 2B) that the stent has a plurality of locking elements 38 extending from the inner longitudinal section.

***Claim Rejections - 35 U.S.C. § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 37-39, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khosravi et al. '515 in view of Martin et al. 6042605. Khosravi et al. is explained as before.

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However, Khosravi does not disclose cooling the sheet after the heating step. Martin et al. teach the step of heat treating to program the shape into the shape memory material, see col. 13, lines 15-16 and then the sheet or stent is cooled before the sheet or elements forming the stent are formed, col. 15, lines 9-13. It would have been obvious to one of ordinary skill in the art to use the teaching of cooling a stent as taught by Martin et al. with the stent of Khosravi et al. in order to more easily fold the stent.

9. Claims 1-3, 5, 6, 8-10, 31-36, 40, 42, 44, 45, 51-55, 57, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray et al. (5895406). Fig. 2 shows a stent cell with wing-like shape and Fig. 6 shows the longitudinal adjacent cells are connected to one another at tips of opposing wing-like elements. Gray et al. disclose a shape memory material for making the stent, col. 5, lines 9-12. Gray also discloses the method of constraining the stent on a delivery device and deploying the stent which deforms to exposure to a second temperature, i.e. body temperature, col. 5, lines 13-19.

10. Claims 16, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray et al. '406 in view of Richter et al. '964. Gray is explained supra. However, Gray does not disclose the use of a plurality of locking elements to engage openings in the outer longitudinal section. Richter et al. teach (Figs. 2A, 2B) a plurality of locking elements 38 extending from the inner longitudinal section for engaging a portion of the stent. It would have been obvious to one of ordinary skill in the art to use locking elements as taught by Richter in the stent of Gray such that the coiled sheet does not expand prior to deployment.

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### *Double Patenting*

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-3, 8-10, 15-17, 20, 51, 52 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4-9, 11, 13 of U.S. Patent No. 6290720. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are similar in scope describing a coiled sheet with overlapping inner and outer portions having "locking elements" and "expandable elements".

### *Conclusion*

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

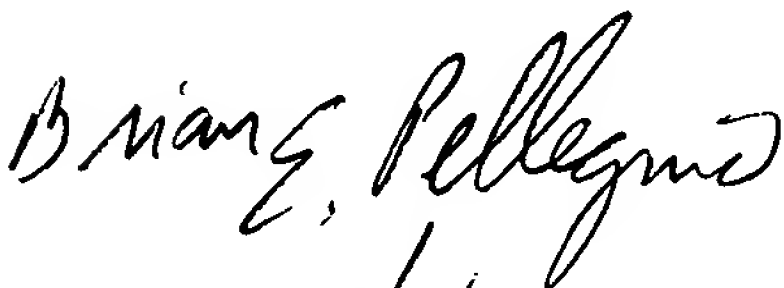
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Pellegrino whose telephone number is (703) 306-5899. The examiner can normally be reached on Monday-Thursday from 8am to 5:30pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on (703) 308-2111. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-2708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Brian E. Pellegrino

  
Bruce Snow  
Primary Examiner  
TC 3700, AU 3738

  
11/7/01